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LIBERALIZATION OF JAPAN'S BEEF AND ORANGE MARKETS: WINNERS AND LOSERS

Summary

For years Tokyo's restrictions on beef and orange imports have been a symbol of the limited market opportunities in Japan for U.S. suppliers of both farm commodities and nonagricultural products. Japan's position as the top customer for U.S. agricultural exports year in and year out has not affected this perception; neither has the fact that Japan is the dominant buyer of American beef and one of the three biggest markets for oranges. That should finally change. Japan has agreed to scrap its import quotas on beef and oranges after a three-year transitional period, during which the government will try to help farmers prepare for the coming era of increased international competition through a costly package of subsidies and loans. Trade will not be free after March 31, 1991 since domestic beef producers and mandarin growers will be protected by high tariffs. American beef and citrus exporters as well as Japanese consumers nevertheless will come out winners. There will, however, be losers on both sides of the Pacific, including U.S. feed grain suppliers.

Helping Farmers

A fixture of the conventional wisdom about Japan is that Japanese farmers receive extensive government assistance and that Japanese food buyers pay a high price for this help. For once the common perception of Japan is on target, at least up to a point. While Japanese agriculture as a sector is heavily supported, this result largely reflects the high level of government intervention in food grains -- particularly rice, which accounts for one-third of the country's gross agricultural output -- and dairy products. Aid for beef producers,

although considerable by any measure, falls short of what rice growers and milk producers get; the same applies to pork, sugar and soybeans. At the other end of the continuum, the amount of support provided to producers of chickens, citrus, noncitrus fruits and vegetables is not out of line with what farmers receive in other industrialized countries.

Whether high, low or in-between, the level of assistance for a commodity does not necessarily translate into an equal level of protection. That calculation depends first of all on the balance between direct farm-subsidy programs, notably price supports, and indirect subsidies resulting from border measures, including state trading, import quotas and tariffs, and then on how prices are supported and what types of border measures are applied. For example, deficiency payments by themselves do not shield farmers from import competition, although they can affect the volume of trade by encouraging domestic production. In Japan, however, there is a close correlation between the level of assistance and the level of protection. The reason is simple: government assistance for most commodities comes largely from import restrictions (chicken and citrus) or domestic price-support programs tied to border measures (rice, dairy products, beef, pork and sugar) (see JEI Report No. 44A, November 20, 1987).

Given the fact that almost every agricultural commodity produced in Japan benefits more or less from import barriers, an obvious question is why the United States has zeroed in on the government's beef and citrus policies. The short answer is by process of elimination. Rice, at least until recently, has been off-limits for political reasons, even though Tokyo's control over both domestic production and trade has produced a near-total ban on imports. An end to state trading of wheat and barley probably would not generate much additional demand, in part because imports already supply 90 percent-plus of the market. Japan's milk and sugar policies, although trade-distortive, never have been serious candidates, either, since the United States provides basically the same type of assistance to American producers that Japan does -- price supports linked with border measures. Pork and chicken also have been out. The variable levy applied to pork imports as part of the domestic price-stabilization system has a limited effect on trade volumes, while the tariff on chicken, practically the only assistance given to poultry producers, has an even smaller impact on imports.

That leaves beef and citrus. By any standard government assistance to beef producers has a substantial impact on trade flows. In broadbrush terms, a system of restrictive import quotas, stiff tariffs (25 percent) and steep markups on foreign beef is used to maintain domestic beef prices within a fixed band. Like other price-support programs tied to border measures, this arrangement is a relatively inexpensive way for the government to help producers since Japanese consumers underwrite a big part of the cost through artificially high beef prices. Wholesale prices of domestic beef are at least twice as high as imported beef prices and these in turn are about double wholesale prices in Australia and the United States. Not surprisingly, per-capita Japanese beef consumption is roughly one-seventh the U.S. level.

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The trade effect of government assistance to mandarin growers -- import quotas on both oranges and orange juice plus high tariffs (20 percent on oranges during the June-November period and 40 percent at other times and about 25 to 35 percent on orange juice) -- is less clear-cut. Border measures obviously inflate the prices of imported oranges, but even without these markups, American oranges still would be more expensive at the wholesale level than mandarins except during the off-season for the domestic fruit. Moreover, the relatively high level of Japanese consumption of citrus, particularly fresh citrus, further limits the import potential for oranges.

The Need for Protection: Beef

Japanese beef producers are high-cost suppliers. That basic fact is the key to the web of measures limiting import competition. Why production costs in Japan far exceed world levels is more complex, but the logical starting point is the limited scale of Japanese beef operations. Approximately 250,000 farmers currently are involved in the beef business, either as breeders or feeders. Most raise wagyu cattle, although these Japanese beef breeds account for only 30 percent-plus of the country's annual beef production. The rest are dairy farmers who generate part of their income from raising and fattening Holstein steers for beef or selling culled cows after some fattening. But whatever the type of cattle, beef production, like most of Japanese agriculture, generally is a sideline activity. In 1987, for example, the average herd had 9.7 head of cattle, an improvement on 1981's figure of 6.5 animals but far too small for cost-efficient production. More telling, 85 percent of all producers still had fewer than 10 head of cattle that year despite a 40 percent reduction in the number of households raising just one or two animals (see Table 1).

Table 1: Number of Beef Producers in Japan, 1981 and 1987

Number of Head	Number of Producers*			
	February 1, 1981		February 1, 1987	
1-2	185,200	52.5%	111,800	41.0%
3-4	78,800	22.3	70,200	25.8
5-9	51,800	14.7	48,700	17.9
10-19	18,300	5.2	20,100	7.4
20-29	6,560	1.9	6,840	2.5
30-49	4,960	1.4	5,410	2.0
50-99	4,500	1.3	5,100	1.9
100 or More	2,800	0.8	4,270	1.6
Total	352,800	100.0	272,400	100.0

*Includes producers raising dairy cattle for beef.

Note: Numbers do not add to total because of rounding.

Source: Ministry of Agriculture, Forestry and Fisheries, Statistical Yearbook.

In one sense, though, the decline in small-scale operations has backfired because it has exacerbated the problem of inadequate supplies of feeder

calves, particularly in the wagyu sector. The uncertain returns from raising calves for fattening has long been recognized as a bottleneck to the development of Japan's beef industry. To overcome this constraint, the Ministry of Agriculture, Forestry and Fisheries set up a price-stabilization program for wagyu calves (males and females) in 1970 and a similar arrangement for dairy steer calves in 1972. Funded jointly by the central government (50 percent), prefectural governments (25 percent) and breeders (25 percent), the programs provide deficiency payments to calf producers when market prices fall below target prices.

This safety net was needed in the early 1980s when calf prices took a nosedive, but most breeders apparently still lost money since payments from the stabilization funds cover only 90 percent of the difference between market and target prices. That experience, coming on top of similar problems in the mid-1970s, convinced large numbers of marginal operators to get out of the calf-raising business. At the same time, many of those who stayed in lost interest in expanding their herds. On paper, at least, that problem should have been eliminated by the strong recovery of calf prices since mid-1984 but, if anything, the calf-breeding base has contracted further.

The constraint of inadequate feeder-calf supplies is compounded by the shortage of grazing land in Japan, which forces the majority of breeders to raise their animals in sheds. This extremely labor-intensive process is, in fact, the main reason Japanese beef producers are not competitive with foreign suppliers. Feeder-calf prices represent roughly 45 percent of the cost of production for farmers fattening wagyu steers and about 40 percent for operations feeding dairy steers (see Table 2). And those prices have been three to five times higher than U.S. levels in recent years.

Compound feed is the other big factor in the cost equation, accounting for another 40 to 45 percent of the total. Feed prices in Japan are not much above charges in the United States and elsewhere since almost all the ingredients used by domestic feed mills are imported. Moreover, beef producers have gotten a break on feed prices for the last three years because of the yen's sharp appreciation and lower international grain prices. What drives up this cost, however, is the Japanese industry's feeding method.

In this country cattle are fattened for about four months since the daily weight gain starts to drop after that time. In Japan, however, wagyu steers are kept on feed for approximately 19 months and dairy steers for 12 to 13 months to increase the amount of marbling in the meat. This method of production is not economically inefficient as long as beef producers can recoup the higher costs of feed associated with extended fattening in their selling prices. In fact, the average fattening operation has made money, although not much, since 1984.

Until recently the government's price-stabilization system for beef, which covers meat from both wagyu cattle and dairy steers, promoted prolonged feeding since support prices were maintained at high levels. In April 1987, however, support prices were reduced for the first time ever. This past April the previously separate support prices for wagyu beef and dairy steer beef were combined and then cut, with the new number 27.4 percent below FY 1987's wagyu beef support price but only 2.5 percent less than the one for dairy steer beef. In announcing the FY 1988 support price, MAFF officials made it clear that the

Table 2: Costs of Beef Production in Japan, 1986

(per head)

	Cost of Fattening Beef Steer	Cost of Fattening Dairy Steer
Purchased Feeder Calf	Y278,595	Y178,615
Feed	235,682	192,179
Commercial Feed	217,603	185,316
Purchased	210,004	183,297
On-Farm Product	7,599	2,019
On-Farm Forage Crops and Grazing	18,079	6,863
Bedding Materials	12,852	10,800
Purchased	8,989	10,210
On-Farm Product	3,863	590
Utilities	3,979	3,016
Veterinary Expenses	4,019	3,529
Operating Expense Interest	1,109	357
Buildings	10,548	7,945
Depreciation	9,495	6,965
Repairs	1,053	980
Machinery	10,133	9,125
Depreciation	8,423	7,570
Repairs	1,288	1,245
Interest Charges	422	310
Labor	80,728	33,566
Hired	30	530
Family	80,698	33,036
Subtotal	637,645	439,132
Purchased	504,562	378,847
Self-Supplied	115,165	45,750
Depreciation	17,918	14,535
Value of By-Products	30,550	15,447
Net Production Expenses	607,095	423,685
Real Estate Interest	20,855	11,638
Rent	4,470	2,813
Total Production Costs	632,420	438,136
Gross Income	732,216	503,696

Note: The average farm fattened 14.3 beef steers or 37.2 dairy steers in 1986. Producers fattened beef steers 19.1 months on average, increasing their weight by 355.5 kilograms (783.7 pounds) for a selling weight of 641.3 kilograms (1,413.8 pounds). Dairy steers were fattened for an average of 12.7 months to a selling weight of 652.7 kilograms (1,438.9 pounds), a gain of 398 kilograms (877.4 pounds).

Source: Ministry of Agriculture, Forestry and Fisheries, Statistical Yearbook.

changes were designed to encourage greater output of lower-priced, medium-grade beef from dairy steers at the expense of high-priced, high-quality wagyu beef production.

Dairy steers have provided much of what little increase has occurred in Japanese beef production during the current beef cycle, which dates to 1984, with culled dairy cows supplying the rest (see Table 3). Recent animal numbers indicate some additional expansion in beef from dairy steers over the short run, but the medium-term outlook is not promising. Because of continuing milk surpluses, fewer dairy cattle are expected to be bred and this will limit the number of dairy steer calves available for fattening.

Table 3: Japan's Beef Supply, 1983-87

(in metric tons; carcass weight equivalent)

	1983	1984	1985	1986	1987
Domestic Production	494,938	536,061	555,256	558,620	564,883
Japanese Beef Cattle	157,894	192,843	201,585	191,876	176,908
Japanese Dairy Cows	160,505	163,493	165,923	172,092	179,414
Japanese Dairy Steers	170,726	173,520	179,772	183,763	195,254
Foreign and Hybrid Beef Breeds	3,499	3,755	5,679	9,004	11,732
Calves	2,314	2,449	2,297	1,885	1,575
Imports	137,426	145,559	150,579	179,104	220,032
Australia	90,952	91,842	92,936	105,167	121,127
United States	37,711	42,238	46,514	63,389	85,292
Total Supply	632,364	681,620	705,835	737,724	784,915
Import Share	21.7%	21.4%	21.3%	24.3%	28.0%

Source: Ministry of Agriculture, Forestry and Fisheries, Statistical Yearbook.

The Need for Protection: Mandarins

While Japan's beef industry has had trouble increasing output at more than a marginal rate, citrus growers have had to grapple with the opposite problem. Keeping the production of unshu mandarins or mikans under control has been a challenge since the early 1970s when trees planted in the late 1960s began producing fruit, yields started rising and, at the same time, the growth in demand for fresh mikans was tapering off. Assuming that these developments were just the beginning of a long-term problem, producer groups, backed by the government, went into action, discouraging the expansion of orchards, pushing growers to eliminate low-yielding trees and promoting increased consumption of juice and other processed mikan products.

By the late 1970s, however, it was apparent that more drastic steps were needed to keep production from putting constant downward pressure on prices, even though the acreage planted to mikans had peaked at 173,100 hectares (about

427,600 acres) in 1973. The response was a government-funded program to cut the size of mikan orchards from roughly 150,000 hectares (370,500 acres) in FY 1979 to 120,000 hectares (296,400 acres) in FY 1983. The program was a success on paper as production contracted from 3.6 million metric tons in 1979 to about 2.9 million metric tons in 1983, but prices, after firming in 1981 and 1982, dropped again in 1983, an "on" year for the alternate-bearing mikan. Clearly the increase in demand for citrus juice was not strong enough to prop up prices in the face of a continuing fall in consumption of mikans as fresh fruit, the market for roughly 70 percent of the annual crop.

MAFF therefore initiated another acreage-reduction project designed to trim the mikan area by an extra 10,000 hectares (24,700 acres) during the FY 1984-FY 1986 peri .. Growers actually exceeded this goal, with the 1986 harvest on the low side even for an "off" production year. But the boost given to prices proved fleeting since the 1987 crop, at 2.5 million metric tons (see Table 4), came in well over target despite another drop in the producing area and thinning of the crop. To make matters worse, a surplus of mikan juice had been added to the problem of declining fresh mikan consumption.

Table 4: Citrus Acreage and Production in Japan, 1983-87

	1983	1984	1985	1986	1987
Growing Area (hectares)					
Unshu Mandarin (Mikan)	120,700	116,400	112,500	108,400	105,100
Mandarin Hybrids and Summer Oranges	34,730	34,620	34,180	33,800	32,930
Naval Oranges	4,970	5,060	5,020	4,840	4,670
Total	160,400	156,080	151,700	147,040	142,700
Production (metric tons)					
Unshu Mandarin (Mikan)	2,859,000	2,005,000	2,491,000	2,168,000	2,518,000
Mandarin Hybrids and Summer Oranges	724,700	661,000	459,700	652,400	710,700
Naval Oranges	59,700	58,700	62,500	61,900	67,000
Total	3,643,400	2,724,700	3,013,200	2,882,300	3,295,700

Source: Ministry of Agriculture, Forestry and Fisheries, Statistical Yearbook.

As prices headed for new lows during the 1987-88 winter marketing season, MAFF officials and grower representatives once again tried to figure out how to bring mikan production into line with demand. The target for the 1988 harvest initially was set at 2.15 million metric tons, close to 1986's output, but later was lowered to 1.9 million metric tons. While it was hoped that this cutback could be achieved through thinning, ministry and industry officials alike recognized that a third acreage-reduction program still might be necessary.

Eliminating Import Barriers

Washington has been trying to break down the barriers that restrict U.S. exports of beef, oranges and citrus juice to Japan since at least the 1960s. With their demand for the removal of the quantitative restrictions on these commodities repeatedly rebuffed in the 1970s, American trade negotiators finally settled in December 1978 for an expansion in the quota volumes over the FY 1980-FY 1983 period. But, as Tokyo quickly discovered when talks on a new beef and citrus arrangement started in October 1982, the United States had not abandoned its goal of liberalization. The two sides battled over what Japan should or could do for 17 months before bridging their differences in April 1984. The compromise committed Japan to expand the quotas on beef, oranges and orange juice by significant margins over the next four years and to decontrol imports of grapefruit juice immediately (see Table 5).

Table 5: Japan's Beef and Citrus Quotas, FY 1983-FY 1992

(in metric tons)

	Beef			Oranges			Concentrate Juice	
Fiscal Year	First Half	Second Half	Total	Annual	Off-Season	Total	Orange	Grapefruit
1983	72,000	69,000	141,000	36,500	45,500	82,000	6,500	6,000
1984	76,000	74,000	150,000	44,750	48,250	93,000	7,000	--
1985	80,000	79,000	159,000	53,000	51,000	104,000	12,500	--
1986	85,000	83,000	168,000	61,250	53,750	115,000	15,000	--
1987	93,000	121,000	214,000	69,500	56,500	126,000	8,500	--
1988	98,500	175,500	274,000	91,500	56,500	148,000	15,000	--
1989	n.a.	n.a.	334,000	n.a.	n.a.	170,000	19,000	--
1990	n.a.	n.a.	394,000	n.a.	n.a.	192,000	23,000	--
1991	[----- no quota -----]			[----- no quota ----]			40,000	--
1992							[no quota]	--

Notes

1. Beef - Includes the general quota (253,600 metric tons in FY 1988) as well as the smaller quotas for hotels (10,000 metric tons), Okinawa (8,000 metric tons), school lunches (1,400 metric tons) and demand development (1,000 metric tons). Also includes imports of high-quality beef, for which there is no separate quota.

2. Oranges - The annual quota covers imports at any time during the year, while the off-season quota is restricted to the June-August period.

3. Orange juice - The jump in the FY 1985 quota reflects an extra 5,000-metric-ton allocation to free domestic output for processing in the wake of a reduced 1984 harvest. The same factor explains why the FY 1986 quota was set at 15,000 metric tons rather than the expected 8,000 metric tons.

4. Grapefruit juice - Imports were decontrolled at the start of FY 1986. In FY 1984 and FY 1985 import licenses were issued to supply demand.

As the March 1988 expiration date of the 1984 agreement approached, the White House took the line that there would be no negotiations on a replacement pact until Japan came up with a "reasonable" timetable for liberalization; in Washington's view, Tokyo already had promised to free imports. For its part, the Japanese government stuck to the position that while additional increases in quotas were acceptable, liberalization was impossible, at least in the medium term. With neither side willing to bend, the 1984 arrangement expired.

The Reagon administration then made good on its longstanding threat to ask the General Agreement on Tariffs and Trade to rule on the legality of Japan's beef and citrus quotas. That action, more than anything, it appeared, convinced senior members of Noboru Takeshita's government and their political colleagues that liberalization was inevitable by the early 1990s. Working out the details of this historic move was another matter, but with a remarkable show of flexibility by both Tokyo and Washington, U.S. Trade Representative Clayton Yeutter and MAFF Minister Takashi Sato came to terms in late June on an arrangement to decontrol Japan's imports of beef, oranges and orange juice.

Japan will remove its quota on beef imports April 1, 1991. During the three-year phase-out period, the import ceiling, fixed at 214,000 metric tons in FY 1987, will be raised by 60,000 metric tons annually to 394,000 metric tons in the April 1990-March 1991 period -- a volume that will bring Japan close to de facto liberalization. By the time the quota is lifted, the Livestock Industry Promotion Corp., which now controls about 80 percent of all purchases and sales of foreign beef, will be out of the imported beef business, although the semigovernmental organization will continue to operate a price-stabilization program for domestic beef.

Equally important in the short run, LIPC is expected to reduce its huge markups on imported beef during the transition to liberalization, although the 25 percent tariff will remain in effect. (These surcharges equaled 96 percent of the landed price of foreign beef in Japan at the time Washington and Tokyo negotiated the new agreement.) High-cost Japanese producers will not be completely at the market's mercy when April 1, 1991 comes around, though, since the United States agreed to Japan's plan to levy tariffs on imported beef of 70 percent in FY 1991, 60 percent the next 12 months and 50 percent from April 1993.

These tariffs were one of the final obstacles to an agreement. The Reagan administration initially ruled out new or expanded border measures after liberalization on the grounds that they could have the same exclusionary impact as the quotas. U.S. trade officials later did some backpedaling. A 50 percent duty was acceptable, they conceded, as long as it was limited to the three-year period following liberalization. In the end Tokyo and Washington compromised, agreeing that the tariff rate after March 1994 would be negotiable during the Uruguay Round of multilateral trade talks.

A similar scenario unfolded on safeguards. Japan wanted some form of permanent authority to counter import surges after the beef market was opened, but American negotiators repeatedly rejected this demand, maintaining that it violated international trade rules. The U.S. side finally gave in, allowing Tokyo to invoke emergency curbs for three years following liberalization. If imports in any April-March period between FY 1991 and FY 1993 exceed the volume of the previous 12 months by 120 percent, the Japanese government can impose an

extra 25 percent tariff for the rest of that fiscal year. After April 1, 1994, though, safeguard actions will be restricted to those permitted by GATT.

The give-and-take evident in the bargaining on beef carried over to oranges and orange juice. Japan will decontrol the orange market at the same time it lifts the quota on beef imports -- April 1, 1991. In the meantime the quota will be expanded by 22,000 metric tons each year or from 126,000 metric tons in FY 1987 to 192,000 metric tons in the April 1990-March 1991 period. Japanese producers will have no protection from import competition after liberalization beyond the current tariffs of 20 percent in the off-season for mikans (June-November) and 40 percent at other times.

Orange juice concentrate imports will be freed April 1, 1992 or a year after oranges are liberalized. To prepare for free trade, the quota will be increased almost five times. During the phase-out period there also will be changes in the requirement that imported orange juice be blended with mikan juice. Starting this year, the regulation will be eliminated for 40 percent of imports. In FY 1989 the restriction will be lifted for 60 percent of foreign purchases, and it will be removed April 1, 1990. In addition, imports of single-strength orange juice and juice mixtures will be allowed for basically the first time.

Easing the Adjustment

Having made the once-unthinkable decision to end the quotas on beef and citrus, Japanese agriculture officials and Liberal Democratic Party leaders had to tackle the equally tough job of figuring out how much assistance and what kind to extend to domestic beef producers and mikan growers to help them adjust to the coming era of liberalized trade. By late August the major details of a Y156 billion ($1.3 billion at Y125=$1.00) package had been finalized. Few new initiatives are contemplated, at least for now; most proposed measures simply build on or revamp existing programs.

Roughly Y50 billion ($400 million) in subsidies and loans has been earmarked for Japan's beef industry in FY 1988 and FY 1989, with some of this money coming from the tariff on imported beef and the rest from the budget. (Additional funds will be provided starting in FY 1990 out of tariff proceeds.) Not surprisingly, the main thrust of this part of the package is to encourage calf-raising in both the wagyu and the dairy sectors, primarily through changes in the two price-stabilization funds. In fact, the target price for dairy calves (now including heifers) has been raised already, while a new formula for calculating the guaranteed price for wagyu calves will be introduced in FY 1990. At the same time, a number of current loan programs will be expanded, including one to encourage larger breeding operations.

The other major planned expenditure -- perhaps as much as Y10 billion ($80 million) -- is for interest subsidies on Y150 billion ($1.2 billion) worth of bank loans held by calf raisers and cattle feeders. This measure, which expands on an existing program, apparently is the only one targeted at fattening operations. Producers as well as agricultural experts in Japan have pressured the government to subsidize feeder cattle purchases to help bring beef production costs closer to international levels, but the enormous price of such a program (a minimum of Y100 billion -- $800 million -- a year to cover one-half of the cost of feeder calves, according to one estimate) makes it hard to sell to the Ministry of Finance.

Expansion of the number of feeder cattle that can be imported duty-free also would help beef producers on the cost front, but this alternative, while far less expensive than the proposed subsidy program, has been rejected as well, at least for the time being. The tariff quota on feeder calves, set at 10,000 head for FY 1986, was raised in FY 1987 to 25,000 head and then kept there for the current fiscal year. MAFF officials say a chronic shortage of quarantine space in Japan prevents an expansion of the tariff quota, but it is clear that such a move would undercut the domestic breeding base.

The Y106 billion ($848 million) program for mikan growers also has created controversy, particularly in the Finance Ministry. As might be expected, it features another acreage-reduction plan, this one to cut FY 1988's estimated planted area of 100,000 hectares (247,000 acres) by 22,000 hectares (54,300 acres) in the hope of decreasing "on" year production from 2.4 million metric tons to 1.8 million metric tons. Growers will receive Y300,000 per 10 ares ($2,400 per quarter-acre, roughly) of land taken out of mikan production. (One hectare equals 100 ares.) With this payment fixed at nearly four times the FY 1984-FY 1986 figure, the new program is expected to cost Y54 billion ($432 million). MAFF has penciled in a three-year timeframe for the cutback but would like to complete it this year.

Aside from Y22 billion ($176 million) set aside to improve productivity and mikan quality, the other major initiative planned is a supplemental price-support program for mikans sold for juice. Assuming that the end of the blending requirement for imported orange juice and an open market will undercut the demand for mikan juice, the government is prepared to spend Y25 billion ($200 million) over the next eight years to compensate mikan growers for the expected extra fall in the wholesale price of fruit for juice. This special payment will be added to 90 percent of the deficiency payment available since 1972 whenever the market price of fruit for processing drops below the target price. The government will cover 75 percent of the cost of the new program and the processing industry will pick up the rest. The standard deficiency payment, however, will be financed equally.

Winners and Losers

Elimination of the import quotas on beef, oranges and orange juice will be a boon to Japan's consumers and U.S. exporters of these products. That much is intuitively obvious. To what extent is another matter, particularly for beef. Research done in the early 1980s indicated that an end to the beef quota would cut Japanese retail beef prices anywhere from 30 percent to 75 percent, boost consumption in the range of 40 percent to 100 percent and lift imports two to six times over then-existing levels. Recent work by American and Australian economists also concludes that liberalization will have enormous effects on the Japanese beef market over the short to medium term, although the orders of magnitude generally are less because newer data were used for price, consumption and import bases.

As all these economists are quick to point out, the validity of their forecasts hinges on some critical assumptions. The key one concerns the comparability of Japanese beef and the imported product. Some analysts believe American grain-fed beef competes with the middle to upper grades of domestic dairy steers or the lowest wagyu grades, while Australian grass-fed beef is comparable to the bottom dairy steer grades. Others think American beef better matches the quality of middle-to-lower-grade dairy steer beef. If this second group is

right, then the impact of liberalization on Japanese retail prices will be at the low end of the projected range, which will limit the gains in consumption and imports. The same applies if the price elasticity of demand for beef is not as high as generally estimated.

There also is some debate over how American exporters will fare against Australian competitors in a deregulated market. Australia has supplied about 60 percent of Japan's beef imports in recent years, with the United States accounting for most of the rest. Several analysts predict that Australia will increase its market share after liberalization since in their view the quota system discriminates against lower-priced Australian beef. Others argue that the consumer preference for moderately marbled beef will work in favor of more purchases of American grain-fed beef. But regardless of which side is right, the volume of U.S. beef exports to Japan will go up significantly simply because of market growth.

On one issue at least there is a consensus: the government will support Japanese beef producers after liberalization through a new system of deficiency payments bridging the widened gap between market prices and production costs. Although the cost of such a program might seem prohibitive, there is no alternative if Japan is to maintain a beef industry anywhere near its current size since elimination of the import quota will gut the existing price-stabilization system.

Under this system LIPC intervenes in the market to keep the wholesale prices of Japanese beef between annually set floor (support) and ceiling prices, buying domestic beef and stocking it when prices fall too low -- a rare development -- or, more frequently, selling stocks when prices move above the ceiling. Since the corporation controls the vast majority of beef imports and normally has no supplies of domestic beef on hand, foreign beef is released into the market to bring down wholesale prices. No longer involved with imports after March 31, 1991, LIPC will not have access to the stocks needed for intervention.

The end to LIPC involvement in the import business will bring another, equally far-reaching change. Because of the enormous difference between the cost of foreign beef to LIPC and its resale price, the organization's buying and selling operations are a huge money-making machine. In FY 1986, for example, LIPC profits on imported beef totaled Y50.5 billion ($404 million). Last year they came to Y31.7 billion ($253.6 million), with the FY 1988 figure estimated at Y38.6 billion ($308.8 million). Most of this money is used to fund off-budget livestock-related projects. In FY 1992, however, the government will have to assume financing responsibility for these programs, although some of the proceeds from the stiff tariff on imported beef could be used for this purpose.

Many analysts worry that there could be losers from beef liberalization on this side of the Pacific as well, particularly U.S. exporters of corn, sorghum, soybeans and other ingredients used in compound feed. One concern is that increased beef consumption will come partly at the expense of pork and chicken, causing a contraction in Japan's big hog and broiler industries and a corresponding drop in demand for U.S. feed ingredients. Another is that even with deficiency payments to Japanese beef producers, there will be a cutback in cattle placed on feed as marginal operators continue to get out of the business.

This obviously would have repercussions for U.S. exports; so would a reduction in the length of the fattening process.

While an end to the beef quota clearly will benefit U.S. beef suppliers, the gains to this country's citrus industry from orange liberalization are expected to be modest. For one thing, American oranges, although lower-priced than now, still will be more expensive than mikans during the six-month mikan marketing season. In addition, the increasing availability of a wide variety of comparably priced fruits, both domestic and imported, will limit future demand for oranges.

At the same time U.S. orange growers, which already provide virtually all of Japan's fresh orange import requirements, could win a significant share of the liberalized Japanese orange juice market. Brazil currently supplies most imported frozen concentrate, but with imports of single-strength orange juice and juice mixtures now allowed, American competitors are expected to have an edge.

For further information, contact Susan MacKnight.

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The views expressed in this report are those of the author and do not necessarily represent those of the Japan Economic Institute.

APPENDIX

Table 1: Japan's Major Agricultural Imports, 1985-87

	Quantity (in metric tons)			Value (in thousands of dollars)		
	1985	1986	1987	1985	1986	1987
Total	---	---	---	$15,364,026	$17,591,643	$19,641,215
Beef and Veal[1]	150,579	179,104	220,032	464,513	554,011	797,385
Beef and Veal Offals[1]	74,752	88,685	91,297	276,268	386,955	402,445
Lamb and Mutton[1]	79,470	79,300	76,698	112,011	111,180	129,831
Pork[1]	190,221	207,719	280,524	694,999	1,037,421	1,414,324
Chicken[1]	100,455	174,429	195,330	142,443	270,594	323,038
Powdered Milk	104,261	90,970	92,406	75,970	68,431	75,643
Cheese	81,639	81,208	94,181	125,069	134,245	169,269
Wheat	5,509,614	5,619,640	5,476,045	983,202	894,778	791,145
Barley	1,660,947	1,362,716	1,247,542	219,250	148,628	133,675
Corn	14,225,106	14,653,155	16,503,661	1,922,680	1,675,242	1,533,131
Grain Sorghum	4,792,798	4,976,180	3,977,277	576,578	502,812	354,018
Malt	432,484	478,608	539,777	137,532	145,787	172,269
Oranges	111,635	117,300	123,425	91,360	98,105	121,312
Lemons and Limes	113,924	125,825	128,184	100,885	100,522	118,276
Grapefruit	120,804	182,431	204,767	78,729	128,012	151,591
Bananas	680,035	764,565	774,840	302,377	378,614	369,375
Fruit Juices[2]	35,104	29,936	33,206	81,760	61,415	77,502
Frozen Vegetables	155,100	185,194	221,593	138,404	122,080	220,999
Canned Vegetables	90,266	105,537	132,545	59,441	56,130	104,782
Sugar	1,924,144	1,819,358	1,757,938	208,942	276,365	290,535
Molasses	785,487	596,163	507,952	56,754	59,690	47,712
Coffee	247,567	263,783	295,164	751,761	1,137,610	844,199
Cocoa	52,237	55,974	56,686	154,984	157,198	160,384
Peanuts	57,223	56,526	53,106	54,662	51,715	59,323
Soybeans	4,909,505	4,817,220	4,797,208	1,216,727	1,088,268	1,096,013
Rapeseed	1,468,617	1,439,943	1,662,336	440,161	304,492	332,260
Palm Oil	161,292	196,039	212,168	93,984	64,463	76,487
Wine[2]	45,293	33,656	34,657	72,835	76,111	135,397
Whiskey[2]	38,797	43,804	51,629	103,339	147,308	215,957
Brandy[2]	12,490	14,077	15,578	69,615	96,937	139,992
Tobacco	60,563	67,781	88,354	366,920	397,377	496,536
Cigarettes[3]	7,648,246	11,790,759	30,463,200	106,380	183,901	511,373
Natural Rubber	523,124	518,610	552,910	410,539	417,535	514,975
Cotton[4]	680,967	694,979	836,308	1,039,511	811,091	1,121,340
Wool	208,465	191,580	231,960	679,039	627,273	1,021,025
Ramie	12,492	16,237	21,402	50,507	73,932	115,584
Cattle Hides and Skins	204,484	198,717	193,966	315,444	375,629	441,787

[1]Fresh, chilled or frozen.
[2]Quantity in thousands of liters.
[3]Quantity in thousands.
[4]Excludes linters.

Note: The following average annual exchange rates were used to convert the yen trade figures: 1985, Y238.54; 1986, Y168.52; and 1987, Y144.64.

Table 2: Japan's Imports of Corn, 1983-87

(in metric tons)

	1983	1984	1985	1986	1987
Total	14,700,900	14,169,620	14,225,106	14,653,155	16,503,661
United States	13,438,302	13,736,803	10,969,579	9,244,260	12,815,743
South Africa	1,030,419	9,674	78,033	1,279,896	1,682,737
China	0	210,469	2,577,801	2,689,018	1,655,239
Argentina	29,808	118,123	466,295	1,276,380	268,147
Feed Corn	11,010,917	10,273,531	10,203,184	10,391,635	11,975,001
United States	10,978,795	9,967,746	8,310,119	7,538,896	10,548,483
China	0	165,221	1,388,557	1,486,779	1,067,135
Argentina	28,778	86,199	410,689	1,190,881	242,945
Corn for Industrial Use	3,689,983	3,896,089	4,021,922	4,261,520	4,528,660
United States	2,459,507	3,769,057	2,659,460	1,705,364	2,267,260
South Africa	1,027,525	9,674	78,033	1,198,507	1,566,299
China	0	45,428	1,189,294	1,202,239	588,104

Table 3: Japan's Imports of Grain Sorghum, 1983-87

(in metric tons)

	1983	1984	1985	1986	1987
Total	2,956,832	4,477,957	4,792,798	4,976,180	3,977,277
United States	656,076	1,860,473	2,571,415	2,079,090	2,448,056
Argentina	2,189,277	1,613,045	1,265,705	1,577,941	796,427
Australia	103,290	1,000,212	792,826	747,959	524,617

Table 4: Japan's Imports of Soybeans, 1983-87

(in metric tons)

	1983	1984	1985	1986	1987
Total	4,994,883	4,515,183	4,909,505	4,817,220	4,797,208
United States	4,646,134	4,180,630	4,345,350	4,331,621	4,099,586
Brazil	23,865	0	220,922	128,089	306,536
China	287,971	307,863	288,572	323,136	290,432

Table 5: Japan's Imports of Wheat, 1983-87

(in metric tons)

	1983	1984	1985	1986	1987
Total	5,816,329	5,978,324	5,509,614	5,619,640	5,476,045
United States	3,347,809	3,432,904	3,231,741	3,241,279	3,102,960
Canada	1,485,708	1,484,726	1,234,201	1,376,860	1,372,587
Australia	982,812	1,060,694	1,043,672	1,001,501	1,000,498
Wheat for Food Use	4,549,127	4,708,290	4,326,330	4,584,096	4,391,032
United States	2,735,782	2,816,800	2,719,568	2,801,482	2,602,313
Canada	1,485,708	1,484,726	1,234,201	1,375,600	1,364,768
Australia	327,637	406,764	372,561	407,014	423,951
Wheat for Feed Use	1,267,202	1,270,034	1,183,284	1,035,544	1,085,013
Australia	655,175	653,930	671,111	594,487	576,547
United States	612,027	616,104	512,173	439,797	500,647

Table 6: Japan's Imports of Cotton, 1983-87

(in metric tons)

	1983	1984	1985	1986	1987
Total	666,281	707,973	680,967	694,979	836,308
United States	315,905	372,174	275,611	200,819	302,476
China	5,583	23,886	75,240	99,113	179,751
Pakistan	45,690	14,736	75,221	99,015	99,517
Australia	45,265	60,585	91,426	101,516	69,310
U.S.S.R.	42,974	37,981	16,475	46,033	38,277
India	10,993	11,076	7,160	23,260	36,241
Egypt	29,571	30,235	28,172	25,857	26,661
Nicaragua	43,320	50,569	37,464	26,017	23,690
Mexico	28,356	37,673	19,065	21,664	17,990

Table 7: Japan's Imports of Tobacco, 1983-87

(in metric tons)

	1983	1984	1985	1986	1987
Total	80,062	75,175	60,564	67,781	88,354
United States	51,706	45,772	38,748	43,905	57,448
Malawi	2,929	3,243	2,685	3,525	5,467
Greece	4,684	6,922	2,881	3,903	5,257
Turkey	5,357	5,262	4,773	5,077	5,238

Table 8: Japan's Imports of Fresh, Chilled or Frozen Beef and Veal, 1983-87

(in metric tons)

	1983	1984	1985	1986	1987
Total	137,426	145,559	150,579	179,104	220,032
Australia	90,952	91,842	92,936	105,167	121,127
United States	37,711	42,238	46,514	63,389	85,292

Table 9: Japan's Imports of Fresh, Chilled or Frozen Beef and Veal Offals, 1983-87

(in metric tons)

	1983	1984	1985	1986	1987
Total	61,953	65,294	74,752	88,685	91,297
United States	50,745	54,540	61,153	74,355	77,422
Australia	5,884	5,529	6,156	7,152	7,877

Table 10: Japan's Imports of Fresh, Chilled or Frozen Pork, 1983-87

(in metric tons)

	1983	1984	1985	1986	1987
Total	166,253	195,611	190,221	207,719	280,525
Taiwan	33,084	50,721	67,822	83,880	134,333
Denmark	17,680	75,098	77,449	78,111	92,943
United States	35,410	22,931	11,906	14,731	21,496
Canada	41,836	29,581	21,947	22,437	20,234

Table 11: Japan's Imports of Fresh, Chilled or Frozen Chicken, 1983-87

(in metric tons)

	1983	1984	1985	1986	1987
Total	100,575	103,726	100,455	174,429	195,330
Thailand	21,353	29,969	35,308	63,598	81,580
United States	64,121	50,827	46,567	75,472	78,100

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Table 12: Japan's Imports of Fresh Oranges, Lemons and Limes and Grapefruit, 1983-87

(in metric tons)

	1983	1984	1985	1986	1987
Oranges	89,191	89,121	111,635	117,300	123,425
United States	89,048	88,465	110,462	115,968	122,192
Lemons and Limes	119,555	122,639	113,924	125,825	128,184
United States	118,158	121,200	111,901	124,912	127,219
Grapefruit	177,289	157,887	120,804	182,431	204,767
United States	166,635	149,884	111,996	176,771	198,784

Source for Tables 1-12: Ministry of Finance, Japan Exports and Imports: Commodity by Country.

Table 13: Major U.S. Agricultural Exports to Japan, 1985-87

	Quantity (in metric tons)			Value (in thousands of dollars)		
	1985	1986	1987	1985	1986	1987
Total	---	---	---	$5,409,105	$5,140,727	$5,699,832
Corn[1]	10,977,346	9,170,655	12,855,529	1,292,583	866,290	1,022,592
Grain Sorghum[1]	2,425,873	2,144,714	2,352,319	240,862	177,363	180,844
Soybeans[1]	4,375,137	4,225,283	3,820,632	951,680	856,132	788,590
Corn By-products	63,321	79,823	101,481	14,635	20,125	26,740
Alfalfa Meal and Cubes	400,494	555,937	517,669	56,812	79,333	68,261
Dried Beet Pulp	326,175	412,815	361,492	43,871	55,137	44,431
Wheat	3,120,324	3,224,286	2,998,896	468,970	424,330	352,280
Beef and Veal[2]	82,580	111,771	126,342	350,627	473,294	549,916
Beef and Veal Offals[2]	36,408	48,097	54,176	76,138	119,378	140,427
Pork[2]	9,183	12,076	19,514	32,654	52,931	90,493
Chicken[2]	45,019	76,011	77,988	55,144	88,791	90,976
Eggs	---	---	---	17,530	35,343	27,442
Lemons and Limes	109,761	124,301	126,534	77,146	84,224	82,156
Grapefruit	107,686	161,335	202,030	51,506	76,380	95,476
Oranges	108,127	112,671	122,790	73,317	68,869	79,534
Fresh Noncitrus Fruit	20,114	32,148	49,986	33,825	50,248	81,731
Fruit Juices[3]	691,513	599,296	776,261	31,196	28,275	39,120
Raisins	20,263	21,107	18,574	21,969	24,221	24,892
Frozen Vegetables	86,822	122,817	136,903	60,958	85,260	99,436
Canned Vegetables	19,830	29,350	44,410	16,056	23,184	34,873
Almonds	17,020	25,417	15,180	45,342	94,166	69,406
Vegetable Oils	42,816	49,188	41,424	37,113	40,165	33,122
Chocolate Products	1,792	4,516	6,721	9,500	22,027	29,356
Cotton[4]	244,110	190,189	306,832	368,042	245,386	413,710
Tobacco	46,269	37,760	47,798	302,387	232,043	300,766
Whole Cattle Hides[5]	6,824,464	6,624,385	5,929,002	276,077	301,974	332,600
Seeds	26,814	30,077	28,580	38,972	36,729	46,468

[1]Excludes seed.
[2]Fresh, chilled or frozen.
[3]Quantity in hectoliters.
[4]Excludes linters.
[5]Quantity in number of pieces.

Source: Department of Agriculture, Foreign Agricultural Trade of the United States.

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